15

PATENT APPLICATION US 10/520,283 COLUNGA, ALFREDO GONZALEZ (PCT ES/2003/000396)

8

CLAIMS

- 1.- (CURRENTLY AMENDED) A system for projecting images of inscribed polyhedrons having polarizable faces, approaching or moving away the projected image on them, comprising:
- 5 -an inner rear projector or <u>plurality</u> bunch of projectors for projecting images such as pictures or movies;
 - -a polyhedron structure comprising two or more inscribed polyhedron bodies, concentric or not, the inner rear projector or <u>plurality bunch</u> of projectors being located in the most inner polyhedron; wherein,
- -the faces of each polyhedron body being screens formed by two sheets of glass, methacrylate or any other multilaminar material with the liquid between them polarizable by an electrical current for making the screen to become transparent when electrical current is applied and become translucent when the current stops,
 - -a transparent screen lets an image or a portion of image pass through it toward the next screen or outside the polyhedron structure and a translucent screen forms the image or a portion of image,
 - -an image or a portion of an image can be formed on one or another corresponding screen so as to modify the three-dimensional location in the space of an image or a portion of image;
- -an spectator is allowed to see an image or a portion of an image on one or another of the corresponding screens of the polyhedron bodies without seeing the inner rear projector or <u>plurality</u> <u>bunch</u> of projectors since a translucent screen is always between the spectator and said inner rear projector or <u>plurality</u> <u>bunch</u> of projectors or all the screens become translucent.

10

20

9

-the system is able of obtaining luminic, three-dimensional and dynamic effects for holding the spectator attention at high-degree with an advertising, didactic or entertainment aim.

- 2.- (CANCELLED) The system according to Claim 1 wherein the inner rear projector or bunch of projectors is associated with a system of multidirectional lens or mirrors or independent auxiliary projectors in the case in which the faces of the polyhedron bodies are not parallel or the polyhedron bodies are conjugated or irregular.
 - 3 (CANCELLED) The system according to Claim 1 wherein the transparent or translucent state of a screen is activated into a sequence by means of a system of luminic, acoustic or thermal sensors which reacts to a stimulus or external agent, associated or not to a computer able to programme the polarization of each screen by means of an electrical current and to select the images to emit by the inner rear projector or bunch of projectors.
- 4.- (CURRENTLY AMENDED) A projection method procedure utilizing a system for
 projecting images on inscribed polyhedrons having polarizable faces, comprising:
 -an inner rear projector or <u>plurality</u> bunch of projectors for projecting images such as pictures or movies;
 - -a polyhedron structure comprising two or more inscribed polyhedron bodies, concentric or not, the inner rear projector or <u>plurality bunch</u> of projectors being located in the most inner polyhedron; wherein,
 - -the faces of each polyhedron body being screens formed by two sheets of glass, methacrylate or any other multilaminar material with the liquid between them polarizable by an electrical current for making the screen to become transparent when electrical current is applied and become translucent when the current stops,

PATENT APPLICATION US 10/520,283 COLUNGA, ALFREDO GONZALEZ (PCT ES/2003/000396)

10

-a transparent screen lets an image or a portion of image pass through it toward the next

screen or outside the polyhedron structure and a translucent screen forms the image or a

portion of image,

-an image or a portion of an image can be formed on one or another corresponding

screen so as to modify the three-dimensional location in the space of an image or a

portion of image;

5

10

15

-an spectator is allowed to see an image or a portion of an image on one or another of

the corresponding screens of the polyhedron bodies without seeing the inner rear

projector or plurality bunch of projectors since a translucent screen is always between

the spectator and said inner rear projector or plurality bunch of projectors or all the

screens become translucent;

the method procedure comprising the step of:

selectively polarize or depolarize by electrical current the liquid between the two sheets

of a screen so as to cause the screen to become transparent or translucent in order to

project an image or a portion of image. so as to obtain luminic, tri-dimensional and

dynamic effects for holding the spectator attention at high degree with an advertising,

didactic or entertainment aim.

20

25